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Docket No.: 8733.014.00-US  
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:  
Yong-Sung HAM

Confirmation No.: 7940

Application No.: 09/134,405

Art Unit: 2871

Filed: August 14, 1998

Examiner: Tai V. Duong

For: IN-PLANE SWITCHING MODE LIQUID  
CRYSTAL DISPLAY DEVICE

Customer No.: 30827

**REQUEST FOR RECONSIDERATION AFTER FINAL OFFICE ACTION**

MS AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the final Office Action, mailed January 25, 2005, wherein pending claims 2, 4, 5, 8, 9, 13, 15, 16, 19, 20, 25 and 26 have been finally rejected, Applicant respectfully requests favorable reconsideration in view of the remarks presented herein below.

On page 2 of the Office Action ("Action"), the Examiner rejects claims 2, 4, 5, 8, 9, 13, 15, 16, 19, 20, 25 and 26 under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,266,116 to Ohta et al. ("Ohta") in view of U.S. Patent No. 4,653,859 to Masaki ("Masaki"). Applicant respectfully traverses this rejection.

In order to support a rejection under 35 U.S.C. §103, the Examiner must establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness three criteria must be met. First, there must be some motivation to combine/modify the applied references. Second, there must be a reasonable expectation of success. Finally, the combination must teach each and every claimed element. In the present case, claims 2, 4, 5, 8, 9, 13, 15, 16, 19, 20, 25 and 26 are not rendered unpatentable by the combination of Ohta and Masaki because the Examiner fails to establish a *prima facie* case of obviousness as discussed below.

In rejecting claims 2, 4, 5, 8, 9, 13, 15, 16, 19, 20, 25 and 26, the Examiner asserts that amended claims 5 and 16 exclude polyimide as the first alignment layer. Therefore, the Examiner asserts that the only difference between the in-plane switching mode LCD device

of Ohta and that of the instant claims is the first alignment layer comprising one of polyamide, SiO<sub>2</sub>, polyvinylalcohol (PVA) and polyamic acid. In addition, the Examiner asserts that Masaki discloses that it was common in the art to employ PVA, SiO<sub>2</sub>, and polyamic acid as the alignment layer. Therefore, the Examiner concludes it would have been obvious to one skilled in the art to “employ PVA, SiO<sub>2</sub> and polyamic acid as the alignment layers in Ohta’s device and method because these alignment materials are art-recognized equivalents for the same purpose.” These assertions are unfounded for the following reasons.

First, the mere fact that amended claims 5 and 16 exclude polyimide as the first alignment layer does not in and of itself establish that the exclusion of polyimide is the only distinction between claims 2, 4, 5, 8, 9, 13, 15, 16, 19, 20, 25 and 26 and the Ohta reference. To the contrary it only establishes that claims 2, 4, 5, 8, 9, 13, 15, 16, 19, 20, 25 and 26 are patentably distinguishable over Ohta for at *least* the reason that Ohta fails to disclose each and every claimed element.

Furthermore, nowhere in Masaki is there any disclosure or suggestion that PVA, SiO<sub>2</sub>, or polyamic acid are “art-recognized equivalents for the same purpose” as suggested by the Examiner. To the contrary, Masaki only discloses that it is possible to form an alignment-controlling coated film such as SiO<sub>2</sub>, Polyimide or poly-p-xylylene, on the line electrodes 22 and the signal electrodes 23 in the liquid crystal optical shutter device of Masaki. Accordingly, nowhere in Masaki is there any suggestion or motivation for altering the polyimide alignment layers as of Ohta.

Finally, even if, *arguendo*, it were known in the art to use PVA, SiO<sub>2</sub>, or Polyimide to form an alignment film for a liquid crystal device it would not in and of itself be sufficient to render the claimed invention obvious. As stated in section 2143.01 of MPEP states “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Ohta specifically discloses that the first alignment layer is made of polyimide (see column 17, line 46). Accordingly, absent some evidence or suggestion of the desirability of altering the alignment material disclosed in Ohta (i.e., polyimide), the rejection of claims 2, 4, 5, 8, 9, 13, 15, 16, 19, 20, 25 and 26, in view of the combination of Ohta and Masaki is improper. Accordingly, Applicant respectfully request reconsideration and withdrawal of the rejection of claims 2, 4, 5, 8, 9, 13, 15, 16, 19, 20, 25 and 26 under 35 U.S.C. §103(a).

The application is condition for allowance. Notice of same is earnestly solicited. Should the Examiner find the application other than in condition for allowance, the Examiner is requested to call the undersigned at 202-496-7500 to discuss the steps necessary to place the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

Dated: April 12, 2005

Respectfully submitted,

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